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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/670,158

09/24/2003

Masami Tanaka

KIOI:038

2829

7590

09/22/2005

ROSSI & ASSOCIATES

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EXAMINER

BEHNCKE, CHRISTINE M

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,158

Applicant(s)

TANAKA ET AL.

Examiner

Christine M. Behncke

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 3 is/are allowed.
- 6) ☒ Claim(s) 1 and 4-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 23 February 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the Application filed 24 September 2003, in which claims 1-14 were presented for examination.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 4-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al., US Patent No. 6,161,427.

3. **(Claim 1)** Watanabe et al. discloses a vehicle rapid deceleration detection device, comprising: a rotation sensor which generates a vehicle speed pulse signal in synchronism with a vehicle speed (vehicle speed sensor 3); an elapsed time measuring unit which measures an elapsed time from a time the vehicle speed pulse signal is inputted (figure 10, circuit 50, Column 3, lines 35-41); a vehicle speed calculating unit which calculates the vehicle speed from the interval of said vehicle speed pulse signal (Column 5, lines 49-52); a vehicle speed memory unit which stores a determined vehicle speed at a prior predetermined time (Column 5, lines 35-37 and Column 6, lines 28-32); a deceleration pulse interval calculating unit which calculates a pulse interval corresponding to a predetermined deceleration relative to the determined vehicle speed at the prior predetermined time stored by said vehicle speed memory unit (Column 6,

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lines 28-32 and Column 7, lines 15-38); and a rapid deceleration determining unit which determines rapid deceleration of the vehicle (acceleration detector 2); wherein said rapid deceleration determining unit compares the elapsed time measured by said elapsed time measuring unit with the pulse interval calculated by said deceleration pulse interval calculating unit, and when the elapsed time is longer than the pulse interval, determines that the vehicle has rapidly decelerated (Column 7, lines 15-38).

4. **(Claim 4)** Watanabe et al. further discloses a control signal transmitting unit which transmits a control signal to a drive unit of said vehicle: wherein said control signal transmitting unit transmits a control signal to said drive unit when rapid deceleration of the vehicle is determined by said rapid deceleration determining unit (Figure 1, Column 5, lines 30-37).

5. **(Claim 5)** Watanabe et al. further discloses wherein said drive unit is a drive circuit which controls engaging or disengaging of a lockup clutch provided to an automatic transmission (Figure 1, Column 5, lines 3-29), and said control signal transmitting unit transmits a control signal to said drive circuit to disengage the lockup clutch engaged, when rapid deceleration of the vehicle is determined by said rapid deceleration determining unit (Column 5, lines 30-37).

6. **(Claim 6)** Watanabe et al. further discloses wherein said rapid deceleration determining unit determines the rapid deceleration of the vehicle when said calculated vehicle speed is within a predetermined set value range (Column 7, lines 15-38 and Column 8, lines 37-51).

7. **(Claim 7)** Watanabe et al. further discloses a brake sensor (brake switch 15), which detects ON/OFF of a vehicle brake; wherein said rapid deceleration determining unit determines the rapid deceleration of the vehicle when ON of the vehicle brake is detected by said brake sensor (Column 8, lines 13-30).

8. **(Claim 8)** Watanabe et al. further discloses as applied to claim 4, wherein said rapid deceleration determining unit determines the rapid deceleration of the vehicle when said calculated vehicle speed is within a predetermined set value range (Column 7, lines 15-38 and Column 8, lines 37-51).

9. **(Claim 9)** Watanabe et al. further discloses as applied to claim 5, wherein said rapid deceleration determining unit determines the rapid deceleration of the vehicle when said calculated vehicle speed is within a predetermined set value range (Column 7, lines 15-38 and Column 8, lines 37-51).

10. **(Claims 10-14)** Watanabe et al. further discloses as applied to claims 4-6, 8 and 9, a brake sensor which detects ON/OFF of a vehicle brake (brake switch 15); wherein said rapid deceleration determining unit determines the rapid deceleration of the vehicle when ON of the vehicle brake is detected by said brake sensor (Column 8, lines 13-30).

Allowable Subject Matter

11. **Claims 2 and 3** are at present considered allowable.

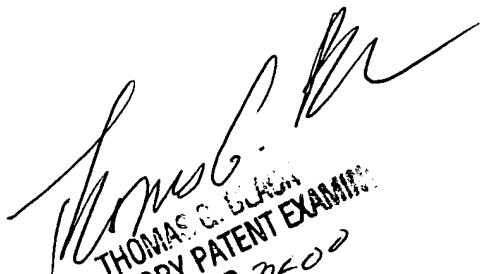
Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine M. Behncke whose telephone number is (571) 272-8103. The examiner can normally be reached on Monday - Friday 8:30 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

09-17-2005


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3600